



US 20150301565A1

(19) **United States**(12) **Patent Application Publication****Manullang et al.**(10) **Pub. No.: US 2015/0301565 A1**(43) **Pub. Date: Oct. 22, 2015**(54) **ACTIVE SCREEN PROTECTION FOR
ELECTRONIC DEVICE**(52) **U.S. Cl.**CPC *G06F 1/182* (2013.01); *G06F 1/1637*
(2013.01)(71) Applicant: **APPLE INC.**, CUPERTINO, CA (US)(72) Inventors: **Tyson B. Manullang**, Sunnyvale, CA
(US); **Stephen B. Lynch**, Portola Valley,
CA (US); **Emery A. Sanford**, San
Francisco, CA (US)(73) Assignee: **APPLE INC.**, CUPERTINO, CA (US)(21) Appl. No.: **14/256,002**(22) Filed: **Apr. 18, 2014****Publication Classification**(51) **Int. Cl.**
G06F 1/18 (2006.01)
G06F 1/16 (2006.01)(57) **ABSTRACT**

An electronic device includes one or more screens, multiple screen protectors moveable between a retracted position and extended position where they extend above the screen to create a gap, and one or more sensors. When the sensor detects a drop event, the screen protectors move from the retracted to extended position, functioning as a shock absorber and preventing the screen from connecting with a surface that the electronic device contacts. In some implementations, the screen protectors may be multiple tabs that may be moved between the retracted and extended positions by one or more motors and/or other actuators coupled to one or more pinions. Such tabs may be formed of various flexible and/or rigid materials such as plastic, plastic film, polyethylene terephthalate or other polymers, metal, thin film metal, combinations thereof, and/or other such materials.

